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# ARIZONA STATE RETIREMENT SYSTEM

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## Information Protection & Security Project Investment Justification



- For more than a half-century, the Arizona State Retirement System (ASRS) has provided retirement, health insurance and long term disability benefits to employees of the state, counties, municipalities, universities, community colleges, school districts and other political entities.
- Current membership is 580,200 with annual distributions at \$3.3 billion.
- We use internally developed applications and IBM FileNet to manage member benefits.
- We use the AZNET Call Center phone system to provide telephone support to members.



Every two years the Arizona State Retirement System (ASRS) hires outside companies to do a security audit which provides us with a score that rates our implementation of security controls recommended by the National Institute of Standards and Technology (NIST).

The ASRS also has a privacy audit conducted every three years, this provides us with a score rating our application of privacy based on Generally Accepted Privacy Principles (GAPP).

Recent audit findings and security events have uncovered two key security related items we would like to address with this project.

- 1. Data Logging-** We have been unable to provide authorities with information about which users have accessed specific accounts in relation to security events.
- 2. Personally Identifiable Information (PII) Protection-** Our most recent Privacy and Security Audit results have shown us areas where we can improve by further limiting internal user access to PII.



## Why doesn't the ASRS purchase a “Commercial Off The Shelf” (COTS) pension management system?

- COTS implementation for a system our size would be \$28,500,000-\$30,000,000 and may not include imaging, workflow or the website portal our current system offers.
- There is no COTS system that comes “out of the box” with the ability to handle all of the legislation and rules that the ASRS is subject to. It will require a lot of customization up front and ongoing.



**Phase 1: Modify FileNet to use PID**

ASRS will transition to identifying people using “Person ID” (PID) for all internal purposes. This is an ASRS specific number that will meet our needs to identify people within the ASRS for all internal business purposes.

**Phase 2: Replace PII within Applications**

Systems/Screens that display SSN/bank account number will be modified to display a portion of the SSN/bank account number. Full SSN access can be granted to specific groups and all access will be logged.

**Phase 3: Create new FileNet Document Class**

A new FileNet document class will be created and utilized to store documents that might contain SSN or bank account number.

**Phase 4: Data Access Logs**

ASRS will add additional access logging for all ASRS applications. This will enable us to track exactly which user id has accessed any screen at the ASRS. We will create a reporting interface to provide useful access logs.

**Phase 5: Call Center Changes**

Eliminate prompting callers for SSN when calling into our call center. We propose using the caller’s Caller ID (ANI- Automatic Number Identification) data to attempt pre identification.



- Reduced access to PII along with Access logging, lowers our risk of internal fraud
- Securing member PII by eliminating SSN as the main identifier in multiple software systems
- Logging solution will provide valuable forensic data in the case of a breach
- Improved compliance with GAPP (Generally Accepted Privacy Principles)



Phase	Estimated Hours	Duration (Months)	Proposed Start Date	Proposed End Date
<b>Phase 1: Modify FileNet and workflow to use PID</b>	5,693	8	7/1/2019	3/4/2020
<b>Phase 2: Replace PII within Applications</b>	2,128	3	3/5/2020	6/5/2020
<b>Phase 3: Create new FileNet document Class</b>	5,750	8.5	6/8/2020	2/23/2021
<b>Phase 4: Data Access Logs</b>	16,273	18	2/24/2021	8/1/2022
<b>Phase 5: Call Center Changes</b>	4,083	5	8/2/2022	1/11/2023



Cost	Amount	Description
<b>Total ASRS Software Development Cost</b>	\$2,959,211	Resource costs for completing all phases of the project.
<b>Call Center (AZNET) Prof. Services (\$135/hr)</b>	\$24,975	Only AZNET can modify the Phone IVR system and Call Center API data.
<b>Call Center ANI Verification Up Front Cost</b>	\$20,000	The currently recommended Automatic Number Identification (ANI) Verification vendor requires this amount up front.
<b>Call Center ANI Verification Yearly Cost</b>	\$60,000	The ANI service is \$5,000 per month. We hope that AZNET will be in a contract with an ANI vendor by the time we implement that will result in this number being reduced significantly.
<b>Storage Cost for Logging Data</b>	\$7,000	Cost of additional hard disks to store the required audit data.
<b>Grand Total</b>	\$3,071,186	There are no ongoing development costs. There will be ongoing service costs for the ANI service.



Risk	Probability	Impact	Mitigation
Technology resources not available to implement within the proposed 3.5 year schedule.	Low	High	TSD has worked with Senior Management to prioritize development efforts for the agency. A five-year plan has been developed to encompass all agency technology goals.
Complexity of adding data logging to all required fields will result in overall system performance degradation.	Medium	Medium	Appropriate time must be built into the schedule to ensure adequate time to fully define requirements and ensure successful completion without affecting system performance negatively.
Customer Satisfaction	Medium	Medium	The increased security that is gained must outweigh the potential negative impacts on the customer experience. We must keep our users up to date regarding our planned changes so there are no surprises.



# Questions?

